Environmental Assessment DOI-BLM-WY-070-EA13-163

Lease Transfer & Issuance

White Tail Butte Allotment Upper White Tail Creek Allotment #12237 #17298
Bobby Harris Brad Harris Lease #4907382 Lease #4915539

Butte Draw Allotment #17297 Morse Land Holdings, LLC Lease #4915537

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The BLM's multiple-use mission is to sustain the health and productivity of the public lands for the use and enjoyment of present and future generations. The Bureau accomplishes this by managing such activities as outdoor recreation, livestock grazing, mineral development, and energy production, and by conserving natural, historical, cultural, and other resources on public lands.

1.0 INTRODUCTION

1.1 Background

The Jayne Harris Trust dissolved and its deeded property dispersed to Bobby Harris, Brad Harris, and Morse Land Holdings, LLC. This base property has grazing preference associated with Bureau of Land Management (BLM) lands in the Whitetail Creek Allotment. Because the base divided into 3 parts, the grazing preference attached to the BLM land also needs division, creating 3 new allotments. Bobby Harris, Brad Harris, and Morse Land Holdings, LLC (applicants) applied for division and transfer of the grazing privileges attached to this property and new leases authorizing grazing. Per 43 CFR 4110, the applicants have preference in obtaining the grazing privileges attached to this property.

The BLM Buffalo Field Office (BFO) proposes to transfer preference and issue new 10 year grazing leases for the following allotments: White Tail Butte (#12237), Upper White Tail Butte (#17298), and Butte Draw (#17297). Pursuant to Federal Land Policy and Management Act (FLPMA) Sec. 402 (c) (3), the applicants receive first priority for receipt of the new lease where lands have an allocation as available for livestock grazing through land use plans, and the lessee complies with the rules, regulations and the terms and conditions of their current lease.

The allotments are adjacent to one another in Northern Campbell County, Wyoming, and 34 miles north of Gillette, Wyoming. Allotment elevations average 3900 feet. The allotments encompass 20,989 acres, of which approximately 16.1% is federal land, 8.9% is state land, and 74.9% is private land. The grazing leases include a total of 3,380 federal acres and 743 animal unit months (AUMs) of forage. The term of grazing is 3/1 to 2/28 and authorization for cattle on all allotments. BLM is analyzing these allotments and their associated grazing leases together because they were previously a single allotment and were under the same management until the dissolution of the trust, and in order to evaluate the effects of this proposal on the wider environment and to better capture cumulative impacts. The lands' map is in Attachment 1. The BLM lands associated with each lease are:

- White Tail Butte Allotment (12237): T.56 N., R. 72 W.: Sec. 19: Lots 8,11,12,13,14; Sec. 20: Lots 4,5,6,7; Sec. 29: Lots 1,2,3,4,5,6, NE¹/₄NW¹/₄; Sec. 30: Lots 5,6,7,8,9,10,11,E¹/₂SW¹/₄, SE¹/₄; Sec. 31: Lots 5,6, E¹/₂NW¹/₄, N¹/₂NE¹/₄.

 T.56 N., R.73 W.: Sec.24: Lots 1,2,3; Sec. 25: Tract 70 A,B,C,D,E,F,G,H,I, J,K,L,M,N,O; Sec. 26: SE¹/₄SE¹/₄; Sec.27: SE¹/₄SE¹/₄; Sec. 35: Lot 1, SE¹/₄SW¹/₄, W¹/₂NW¹/₄, SE¹/₄NW¹/₄.
- Upper White Tail Creek Allotment (17298): T.55 N., R. 72 W.: Sec. 6: Lot 7, SE¹/₄SW¹/₄, SW¹/₄SE¹/₄; Sec.7: S¹/₂NE¹/₄, W¹/₂SE¹/₄; Sec.8: S¹/₂NW¹/₄ West of fence; Sec.17: NE¹/₄NW¹/₄, NW¹/₄NE¹/₄S & W of fence; Sec.18: Lot 2, SE¹/₄NW¹/₄.

 T.55 N., R.73 W.: Sec. 1: Lot 5; Sec.2: Lots 5,6,7; Tract 42A,B,C,D
- Butte Draw Allotment (17297): T.55 N., R. 72 W.: Sec. 8: S½NW¼ East of fence; Sec. 9: S½S½; Sec.10: SE¼NE¼; Sec.11: NW¼NW¼; Sec.17: NE¼NE¼,NW¼NE¼ North & East of fence; Sec. 22: NE¼NW¼.

 T.56 N., R.72 W.: Sec.31: Lots 7,8,13,14,15,16,17, S½NE¼

This environmental assessment (EA), WY-070-EA13-163, documents the analysis conducted to determine what impacts the proposed action will have on the environment. The current grazing lessees own the base property associated with their respective allotments. Each of these parties currently holds the grazing authorization for the associated allotment. The existing leases issued in February 2013 under authority of Section 416, Public Law 111-88 (Appropriations Act), which allows for authorization of grazing until an analysis is complete. The grazing lessees applied for transfer of the grazing privileges and issuance of new leases authorizing grazing on their respective allotments. Because the leases were last issued under the Appropriations Act, adequately completing processing these leases requires a new analysis. Upon affirmative final decision of this EA's proposal BLM may offer a new 10 year term grazing lease to each lessee.

The Buffalo Resource Management Plan (RMP) amendment to adopted the *Standards for Healthy Rangelands and Guidelines for Livestock Grazing Management for Public Lands Administered by the Bureau of Land Management in the State of Wyoming* (S&Gs) (1997). BLM conducted a S&G assessment for the Whitetail Creek Allotment (source of these 3 allotments) in August 2010. The allotment was meeting all standards. Previous monitoring in 2001 and 2009 determined that the rangeland in the allotment was in late seral condition. Going forward, the White Tail Butte Allotment will be an "M" (maintain) category allotment, as it contains the previous monitoring locations and contains the most BLM land of the three new allotments. The allotment will have a higher priority for management and evaluation to maintain its high quality condition. The Upper White Tail Creek and Butte Draw allotments will be "C" custodial category allotments, which are lower priority for evaluation. Active management of category "C" isolated public lands is at a public cost and management effort largely beyond the scope of generating public benefit; see generally, Ted Lapis v. U.S., 178 IBLA 62 (2009).

1.2 Purpose and Need for the Proposed Action

The Buffalo RMP allocated lands as available for domestic livestock grazing during land use planning. The proposals' purpose is promoting healthy sustainable rangeland ecosystems and the efficient, effective administration of grazing on public lands per GM-1 to GM-4, pp. 10-12; and the management objective and 4 decisions from the 2001 RMP update, pp. 17-19. The need for the proposal is to respond to the dissolution of the Jane Harris Trust as it affects the 3-way transfer of private lands in the old White Tail Creek Allotment.

<u>Decision to be Made</u>: The BLM will decide whether or not to transfer the grazing preference on the Whitetail Creek Allotment to the applicants, and whether or not to issue new 10 year term grazing leases, with no change in terms and conditions relative to each BLM parcel, for the following leases: #4907382, #4915539, and #4915537, and, if so, how to balance the proposed action with multiple public uses.

1.3 Scoping and Issues

The BLM conducts its decision-making per the requirements of the Council on Environmental Quality (CEQ) regulations implementing NEPA, and the Department of Interior (DOI) and BLM policies and procedures implementing NEPA. NEPA and the associated regulatory and policy framework require federal agencies use the scoping process in their decision-making. This EA received internal scoping from an interdisciplinary (ID) team in the BLM BFO. The identified issues are below and receive analysis in Sections 3 and 4 of this EA:

• How would the proposal affect current livestock grazing management?

- How would the proposal impact riparian areas/drainages?
- How would the proposal impact invasive species?
- How would the proposal impact sensitive soils?
- Would and how would the proposal affect any special status species, particularly Greater Sage-Grouse (candidate species)?
- Would the proposal impact migratory bird habitats or populations?
- How may the proposal impact cultural resources and/or lands with wilderness characteristics?
- How can grazing impact native vegetation?
- Whether there is a need for the lessee to have these grazing leases renewed

BLM sent this EA to interested parties of record and posted it on the Buffalo Field Office (BFO) website: http://www.blm.gov/wy/st/en/info/NEPA/documents/bfo.html to solicit public and agency comments over a 30-day period. BFO uses these comments to assess whether the EA covers the issues and adequately addresses their significance. The BFO's response consists of either addressing public comments in the decision record or prepares a new EA.

2.0 PROPOSED ACTION AND ALTERNATIVES

2.1 Alternative I – Proposed Action– Transfer of Grazing Preference and Issuance of Leases without Modification

The BLM proposes to maintain and improve land health and enhance habitat conditions on public lands in the BFO stewardship area by maintaining and/or enhancing upland grassland health and sagebrush habitats (species composition and structure) and maintaining riparian, wetland, and aquatic habitats through existing livestock grazing management.

Since the applicants propose no changes in grazing use, the Proposed Action Alternative and the No Action Alternative are the same (See Washington Office Instruction Memorandum No. 2000-022, Change 1 (1999)). The proposed action is to divide and transfer grazing privileges on the Whitetail Creek Allotment and offer new 10 year term grazing leases for the following allotments: White Tail Butte (12237), Upper White Tail Creek (17298), and Butte Draw (17297). Alternative A allows the BLM to offer or withhold any or all of the proposed allotments in Table 1, below, singularly or in any combination, in the most efficient, effective legal means. There are no modifications to the current terms and conditions relative to each BLM parcel as outlined in the existing lease, see Table 1 for mandatory terms and conditions) of the proposals.

Table 1. List of Leases and the corresponding allotments associated with the lease

Authorization Number		Allotment Name	Public	uana	Livestock Number	Livestock Kind	Season of Use	AUMs	Type of Use
4907382	12237	White Tail Butte	2061	23	153	Cattle	3/1-2/28	422	Active
4915539	17298	Upper White Tail Creek	700	11	119	Cattle	3/1-2/28	157	Active
4915537	17297	Butte Draw	619	10	137	Cattle	3/1-2/28	164	Active
		Total	3380				Total	743	

The following terms will be lease, "Other Terms and Conditions". These make the lease to conform to the goals, objectives, and decision of the Buffalo RMP Records of Decision (RODs).

- This authorization is subject to cancellation, suspension, or modification for any violation of the regulations at 43 CFR Part 4100, or of the terms and conditions of the authorization
- The terms and conditions of your lease may be modified if additional information indicates that revision is necessary to conform to 43 CFR 4180
- Lessee agrees to allow authorized officers of the USDI-BLM to enter the leased lands at any time for the purpose of inspection
- Please notify BLM if number/kind of livestock or dates of use change

The proposed action will issue new 10-year term grazing leases to the applicants. The applicants are currently in good standing with the BLM and meet all mandatory qualifications for obtaining a grazing lease per 43 CFR 4110.1 and 4110.2. In accordance with Title 43 CFR 4130.2(a), "Grazing permits or leases shall be issued to qualified applicants to authorize use on the public lands and other lands under the administration of the [BLM] that are designated as available for livestock grazing through land use plans." During the 10 years or following the end of the permit, BLM may modify the permit if information indicates it requires management changes to ensure the allotments meeting or make material progress towards achieving the S&Gs.

The applicants are not proposing any projects or other surface disturbing activities in connection to these lease issuances. The BLM will analyze any future range improvement projects associated with these allotments under separate, site-specific analysis.

2.2 Alternative II – No Grazing Alternative

Under this alternative the BLM will not permit livestock grazing on the White Tail Butte (12237), Upper White Tail Creek (17298), and Butte Draw (17297) allotments. Alternative B allows the BLM to emplace a no grazing provision on any or all of the proposed allotments in Table 1, above, singularly or in any combination, in the most efficient, effective legal means. The existing grazing leases will be cancelled in accordance with 43 CFR parts 4100 and 1600 to eliminate grazing on the allotments.

2.3 Alternatives Considered but not Analyzed in Detail

2.3.1 Greater Sage-Grouse (GSG) Alternative.

BLM IM WY-2012-019 (2012) requires the BLM to address a reasonable range of alternatives in livestock grazing EAs in order to assess the impacts of livestock grazing on GSG habitat and land health. The IM also stipulates that BLM should consider a deferred grazing system alternative if the size of the allotment warrants. The size and continuity of the public lands in these allotments make a BLM-administered deferred or rest-rotation grazing system an unreasonable, infeasible alternative in these specific cases because of the proposals' mixed land ownership and the transferring allotments to new operators. The White Tail Butte Allotment will be an "M" category allotment, will receive monitoring and maintenance to maintain the S&Gs, and to provide high-quality wildlife habitat. The Upper White Tail Creek and Butte Draw Allotments will be "C" custodial allotments.

2.4 Relationship to Statutes, Regulations, Plans, or Other Environmental Analyses

This EA fulfills the 1969 National Environmental Policy Act (NEPA) requirement for site-specific analysis. The proposal and its alternatives are in accordance with the following laws and/or regulations, other plans, and are consistent with federal, state, and local laws, regulations:

- NEPA
- Taylor Grazing Act of June 28, 1934, as amended (43 U.S.C. 315 through 315r)
- The Public Rangelands Improvement Act of 1978 (43 U.S.C. 1901, et seq.)
- FLPMA
- 43 CFR § 4100 Grazing Administration-Exclusive of Alaska
- Grazing Regulations as codified in 43 CFR § 4100 as amended in 2005
- Endangered Species Act of 1973 (ESA), as amended (16 U.S.C. 1531 et seq.)
- Clean Water Act Section 303d
- National Historic Preservation Act of 1966 Section 106
- Sikes Act of 1969 (Habitat Improvement on Public Land)
- Fish and Wildlife Improvement Act of 1978
- Executive Order 13186 Responsibilities of Federal Agencies to Protect Migratory Birds
- Interagency Cooperation Regulations (50 CFR 402)
- BLM Instruction Memorandum No. WY-2010-012, Greater Sage-Grouse Habitat Management Policy on Wyoming BLM Administered Public Lands including the Federal Mineral Estate (Maintained into the Buffalo RMP)
- DOI Secretarial Order No.3310—Protecting Wilderness Characteristics on Lands Managed by the BLM, Dec. 2010
- Standards for Healthy Rangelands and Guidelines for Livestock Grazing Management for the Public Lands Administered by the BLM in the State of Wyoming, December 2004

The proposals and alternatives conform to the Buffalo RMP RODs, 1985, the 2001 amendment, and the Powder River Basin Oil & Gas Project Final Environmental Impact Statement and Resource Management Plan Amendment (PRB FEIS), 2003. The action is consistent with the RMP terms and conditions; 43 CFR 1610.5-3(a). The Buffalo EISs analyzed grazing's impacts.

3.0 AFFECTED ENVIRONMENT

3.1 Introduction

White Tail Butte (12237), Upper White Tail Creek (17298), and Butte Draw (17297) allotments have access via county roads including; Bay Horse, Elk Creek, and Collins Roads. There is legal public access to BLM land to all 3 allotments from the Elk Creek and Collins Roads. The allotments are in the Powder River Basin and Pine Scoria Hills level IV ecoregions, which are unglaciated, irregular and dissected plains. Perennial steams in the area are of montane origin with sand, gravel, and cobble substrates. The area's ephemeral or intermittent streams have sandy or silty substrates. The Pine Scoria Hills have rugged, broken land and stone rough hills covered by open ponderosa pine forest or savanna. The precipitation zone is the 15-17" Northern Plains (NP) Major Land Resource Area (MLRA). Mean temperatures in January are 0°F (low) and 36°F (high) and in July they are 52°F (low) and 88°F (high). (Chapman, et al., 2004)

In addition to the grazing leases, BLM authorized other uses on the public lands in the allotments, see Section 4.2. Table 2 shows the authorized rangeland improvement projects in these allotments. Maintenance of these projects is the grazing lessee's responsibility.

Table 2. Other authorized uses on public lands

Allotment Name	Allotment Number	Project Name (Project Number)	Condition
		W. Whitetail Well (965604)	Unknown
White Tail Butte	12237	W. Morse Well (6014)	Unknown
		E. Morse Well (6015)	Unknown
Dutta Draw	17297	Davis Fence (727)	Unknown
Butte Draw 17297		Butte Draw Boundary Fences (016308)	New

Livestock grazing, wildlife use, and oil and gas production are common area land uses. Recreation, primarily big game hunting may also occur. The public lands in these allotments are clearly lacking in wilderness characteristics due to their small size (less than 5,000 acres).

The following critical elements are not present and will not be further analyzed:

Air Quality Hazardous or Solid Wastes Human Health and Safety
Prime or Unique Farmlands Wild and Scenic Rivers Visual Resource Management
Flood Plains Environmental Justice Wilderness Characteristics

Native American Religious Concerns Mineral Resources

Areas of Critical Environmental Concern Water Quality / Drinking Water

3.2 Livestock Grazing

BLM has 3 allotment categories to identify areas where management may focus, as well as to prioritize work and range improvement funds. The categories are: improve existing resource conditions (I), maintain existing resource conditions (M), or custodial management (C) (USDI 2008). The White Tail Butte Allotment is a category "M" allotment, meaning that its management maintains existing resource conditions. Rangeland health assessments and monitoring show BLM met these objectives. The allotment will continue to be a monitoring priority to ensure sustainment of the S&Gs. The Upper White Tail Creek and Butte Draw Allotments are category "C" allotments, meaning their management is minimal in nature, due to the small amount of public land in the allotments. The BLM's rationale for this classification is that there are no identified resource problems, and the size and continuity of the public land is not conducive to more intensive BLM management. The allotments have low potential for yielding a positive return on public investment in management or rangeland projects.

These proposed allotments received grazing for many years and BLM authorized livestock grazing year round. The total AUMs available for grazing on public lands in the allotments is 743 AUMs. The allotments are primarily private lands. Authorized range improvements include those shown in Table 2. Table 3 describes the current breakdown of ownership and AUMs.

Table 3. Ownership and AUMs

Allotment #	Allotment Name	Surface Ownership*	Acres	Percent	AUMs	Percent
		BLM	2,061	24%	422	23%
12237	White Tail Butte	Private	5,330	62%	1,155	63%
		State	1,230	14%	257	14%
		Total	8,621		1,834	
		BLM	700	11%	157	11%
17298	Upper White Tail Creek	Private	5,617	89%	1,270	89%
		State	-	-	-	-

		Total	6,317		1,427	
		BLM	619	10%	164	10%
17297	Butte Draw	Private	4,770	79%	1,296	79%
		State	646	11%	180	11%
		Total	6,035		1,640	
		Total (all allotments)	20, 973		4,901	
		BLM (all allotments)	3,380		743	
		State (all allotments)	1,876		437	
		Private (all allotments)	15,717		3,721	

^{*}Note: BLM estimated portions of this table and compiled it using ArcGIS data so it may not represent exact acres or AUMs on private and state land.

3.3 Soils

Aridisols and Alfisols are the most common soils in the 3 allotments. Aridisols are mixed alluvium derived from andesite, limestone, and quartzite. Aridisols are well drained with a low runoff classification and an Aridic moisture regime. Alfisols formed under forest and accumulated clays in subsurface horizons. Both are often used as rangelands. According to the sensitive soils layer for the BFO, about 80 acres of 278-Fairburn-Samsil-Bandland complex are present in these allotments. These soils are susceptible to water erosion. No other soils on public lands in the allotments were sensitive to wind or water erosion.

The principal soils found on public lands consist of the following soil map units:

174-Brislawn-Rockybutte-Ironbutte complex, 0 to 10 percent slopes

225-Ucross-Iwait-Fairburn loams, 3 to 30 percent slopes

239-Ironbutte-Fairburn-Mittenbutte complex, 6 to 40 percent slopes

244-Muleherder-Ironbutte channery loams, 3 to 40 percent slopes

324-Ucross-Fairburn loams, 15 to 45 percent slopes

A complete description of these soils can be found in the (Soil Survey Geographic (SSURGO) database for Campbell County, Wyoming, Northern Part, 2011) published by the US Department of Agriculture Natural Resources Conservation Service (NRCS).

3.4 Vegetation

The principal ecological sites in the allotments are Shallow Loamy, Loamy, and Clayey. Other range sites or ecological sites found in the allotment include Sandy and Lowland. The primary vegetative type in the allotments is Wyoming big sagebrush type. Vegetation found on these sites include Wyoming big sagebrush, silver sagebrush, winterfat, rabbitbrush, green needle grass, needle-and-threadgrass, western wheatgrass, bluebunch wheatgrass, prairie Junegrass, Sandberg bluegrass, bluegrama, little bluestem, asters, paintbrushes, clovers, biscuitroot, western yarrow, fringed sagewort, Hood's phlox, buckwheats, and other grasses and forbs. Most growth on these sites occurs during May and June. According to the ecological site description (2011), these sites deteriorate species, i.e., blue grama and big sagebrush increase and cool-season grasses such as needlegrass, needle-and-threadgrass, and rhizomatous wheatgrasses will decrease in frequency and production. Annual bromes will commonly increase with improper management as well. Vegetation types such as mixed grass prairie, ponderosa pine intact, and greasewood fans and flats are also present. A more complete description of each ecological site can be found on the NRCS's Ecological Site Description webpage. Currently BLM authorizes 743 AUMs on BLM lands in the allotments. BLM calculated the AUMsd using the Land Planning and Classification

Report of the Public Domain Lands in the Powder and Missouri River Basin (DOI BLM, 1956). BLM calculated these AUMs using light to moderate stocking rates.

3.5 Noxious Weeds and Invasive Non Native Plant Species

Invasive species and noxious weeds exist in the affected environment. The primary species in the area is leafy spurge (*Euphorbia esula*), downy brome (*Bromus tectorum*) and to a lesser extent, Japanese brome (*Bromus Japonicus*). Downy brome, also referred to as cheatgrass, is present throughout the area but primarily exists along two track trails and other areas of disturbance. Downy brome is an invasive nonnative annual grass that can degrade native plant communities. At this point in time downy brome is not a major component of the native plant communities in the allotments. BLM will aggressively treat noxious weeds posing a risk to native vegetation in the allotments if discovered in the future using an integrated pest management (IPM) approach.

3.6 Water Resources

There are 2 principal drainages in the area. White Tail Creek runs through the Upper White Tail Creek and Butte Draw allotments, and Elk Creek runs through the White Tail Butte Allotment. The creeks are all on private lands, except for 0.33 miles of White Tail Creek which flows across BLM land in the Upper White Tail Creek Allotment. All other drainages on public lands in the allotments are ephemeral. The area is part of the Little Powder River/Powder River drainage system as well as the Yellowstone River drainage system. The only other water sources on public lands are the water wells in the White Tail Butte Allotment.

3.7 Wildlife

3.7.1 Migratory Birds, Special Status Species, Threatened and Endangered Species, and Small Mammals

BLM conducted wildlife evaluations assessing the occurrence of selected wildlife species and their habitats, and evaluated the anticipated effects associated with issuing these grazing leases on the White Tail Butte, Upper White Tail Creek, and Butte Draw Allotments. The evaluations included selected individual species or species groupings that are ecologically, economically, or socially important. Evaluation methods included comparison of aerial imagery (1994 to 2009) and review of wildlife geospatial datasets (available at BFO). Datasets included occurrence information for big game, raptors, bald eagles, GSG, sharp-tailed grouse, mountain plover, black-tailed prairie dogs, and sagebrush in the project area. Wildlife habitats in the allotments are results of a complex history of natural and man-caused influences; see generally, (Baker, 2006), (Mack & Thompson, 1982), (Cassity, 2007), (Patterson, 1952), and (Leopold & Miller, 1954). Appendices A.1 and A.2 summarize the affected environment for selected wildlife.

3.7.2 Candidate Species

This EA discusses GSG in detail because they are a candidate species, currently warranted for listing under the Endangered Species Act (U.S. Fish and Wildlife Service (FWS), 2010) and are of heightened management concern in the BFO. GSG are also a Wyoming BLM sensitive species and a Wyoming Game & Fish Department (WGFD) Species of Greatest Conservation Need (SGCN). GSG habitat is present on BLM lands in the White Tail Butte (12237), Upper White Tail Creek (17298), and Butte Draw (17297) allotments. Habitat models indicate that BLM lands in all 3 allotments have a small amount (less than 30%) of high quality winter habitat and high quality nesting habitat for GSG. The models reflect the presence of a known lek in the White Tail Butte (12237) allotment. There are no GSG leks in the Upper White Tail Creek (17298) and Butte Draw (17297) allotments.

Domestic livestock grazing occurred in these allotments and "within the range of [GSG] for over 150 years and is the most common and widespread use of rangelands in the western United States. Livestock grazing practices may affect herbaceous composition, cover, and height and has a potential to impact sagebrush habitats. WY BLM has [S&Gs] to ensure proper livestock grazing management on public lands which can help maintain healthy rangeland conditions and provide functional habitat for [GSG]. However, poor livestock grazing practices can have long-term negative impacts on [GSG] habitat by degrading sagebrush, meadow, and riparian communities (Bohne, Rinkes, & Kilpatirck, 2007)." BLM WY-IM-2010-012 (2009).

3.7.3 Big Game

Big game species occurring in the EA area include pronghorn, whitetail deer, and mule deer. Table 4 summarizes WGFD big game seasonal range data for the allotments. Yearlong use is when a population makes general use of suitable documented habitat sites in the range on a year-round basis, but animals may leave the area under severe conditions. Winter-yearlong use is when a population or a portion of a population of animals makes general use of the documented suitable habitat sites in this range on a year-round basis, but during the winter months there is a significant influx of additional animals into the area from other seasonal ranges. As of the most recent available report, populations of whitetail deer in their respective hunt areas are above WGFD objectives (Wyoming Game and Fish Department(WGFD), 2011b). Populations of mule deer and pronghorns are below their WGFD objective.

Table 4. Big Game Seasonal habitat provided in each Allotment

Species	White Tail Butte	Upper White Tail Creek	Butte Draw
Whitetail deer	Yearlong (less than 10%)	None	None
Mule deer	Yearlong/Winter-Yearlong	Yearlong	Yearlong
Pronghorn	Yearlong	Yearlong	Yearlong/Winter Yearlong

3.7.4 Raptors

Raptors use all 3 allotments for breeding, foraging, wintering, or migration. Common raptor species frequenting the allotment include golden eagle, northern harrier, red-tailed hawk, Swainson's hawk, American kestrel, short-eared owl, and great-horned owl. Less common species that may use habitats in the area include bald eagle, rough-legged hawk, and merlin. Raptors generally prey upon small mammals, reptiles, and fish. Their survival and reproductive success depends, in part, upon the availability and abundance of these food sources.

3.8 Cultural, Historic Values, and National Register of Historic Places (NRHP) Eligibility

There is no Class III inventory for cultural resources on the majority of the White Tail Butte allotment, although the Wyoming Cultural Records Office database revealed that 13 inventories related to oil and gas development, pipelines, seismic lines and the Class II PRB survey project yielded 10 prehistoric sites and 2 historical sites. Three sites (48CA6219, 48CA6220, and 48CA6221) were eligible for inclusion in the NRHP; whereas 4 sites are not NRHP-eligible and 5 sites lack evaluation. There may be additional unrecorded cultural sites, some of which may be NRHP-eligible, in the allotment.

3.9 Socioeconomics

Ranching is a strong component of local society and has a historical value, as grazing occurred in the area since the late 1800s. According to the (U.S. Department of Agriculture, 2010)

Agricultural Census Publication the value of sale of cattle and calves, Wyoming ranked 24th in the country and 4th for sheep and lambs. The ranking of market value of Ag products sold, cattle and calves sold ranked 1 in the state and 5th for sheep and goats. These statistics show that the ranching industry is a key component in Wyoming agriculture as well as the nation's agriculture, and the sales from the livestock are linked to the commodity value of public rangelands. Public lands are an intricate part of the ranch operation, as it is intermingled with private and state land making it difficult to use one parcel without using the other. The grazing lease helps maintain integrity of the ranch operation and lends to supporting the cultural lifestyle of the lessee.

Public lands contribute to the receipts in the state through "payment in lieu of taxes" by the federal government. All three of these allotments were established according to provision of Section 15 of the Taylor Grazing Act. Receipts from grazing on Section 15 lands are distributed two ways: 50% goes to the federal government for range betterment projects, and 50% is returned to the state government. The grazing fee is \$1.35 per animal unit month (AUM) on public land, \$5.13/AUM on Wyoming State Lands, and an average of \$17.60/AUM on private lands. The grazing leases described in this EA generate approximately \$1003 annually.

4.0 ENVIRONMENTAL EFFECTS

4.1 Direct and Indirect Effects

4.1.1 Livestock Grazing

Alternative I-Proposed Action Alternative

The impacts associated with livestock grazing are should continue upon issuing new leases. These impacts include nutrient cycling, physical damage to vegetation, trailing along fences, trampling and heavier grazing use at salted areas. This alternative would allow for the grazing lessees to continue to grazing on their respective grazing allotments. Livestock would continue to use up to 743 public AUMs annually; see Table 1, above. Rangeland vegetation inventory (DOI BLM, 1956) data, along with monitoring data from 2001, 2009 and 2010 indicate an adequate amount of forage is available to support the proposed number of livestock and for wildlife use and the effects of that use in the allotments. The new grazing leases authorize the same numbers, kind of livestock, and season of use relative to each BLM parcels as the previous lease. This action is not proposing any changes to grazing management. The BLM does not expect the transfer and issuance of the grazing leases to have any effects on range management.

Alternative II-No Grazing Alternative

FLPMA requires the BLM to manage public lands and resources according to the principles of multiple use and sustained yield and recognizes the Nation's need for domestic sources of minerals, food, timber, and fiber. and requires the BLM—except in cases of emergency—to give two years' notification when an authorization for domestic livestock grazing is cancelled, in whole or in part, to devote the associated lands to another public purpose, including disposal. The Buffalo RMP states as a resource management decision that livestock grazing is allowed on all public lands in the resource area except on about 6,000 acres where it has been determined to be incompatible with other resource uses or values.

There are no fences or natural barriers separating BLM and non-BLM lands. At this time, fencing out the public lands is not practical or cost effective. If extraordinary circumstances arise, such as the identification of an endangered plant or damageable cultural resource on the site, fencing may be a greater priority, and the BLM will address the matter in a separate

analysis. If the public lands are not leased, and subsequently not fenced, any livestock use occurring thereon is unauthorized. Selecting this alternative will affect how the adjacent private and state lands are grazed because the operator must keep livestock off public lands through herding or fencing, or else be in violation of federal grazing regulations. The mixed ownership pattern in the BFO resource area makes herding difficult, in addition to the fact that herding does not ensure that public lands are not grazed. A rider needs to remain with livestock at all times. Because it is not economically feasible for the BLM to fence all federal land parcels, fences will likely be constructed on private land, fragmenting the area and making BLM unable to stipulate wire spacing to facilitate wildlife movement. Most four-strand fences on private land have a top wire of 46-48 inches with 10-12 inch wire spacing and all wires are barbed. In the absence of fences, the BLM must constantly supervise the public lands to assure they are not being grazed.

BLM identified no adverse resource impacts resulting from livestock grazing which would warrant cancellation of all grazing on these allotments. The Buffalo RMP allows for adjustment of forage allocation based on an evaluation of monitoring, field observations, or other data as needed. Additionally, changes in grazing practices can be effective in mitigating impacts without a corresponding reduction in forage allocation.

4.1.2 Soils

Alternative I-Proposed Action Alternative

Grazing can exert both beneficial and detrimental effects on a soil resource. The main effects that livestock grazing has on the soil resource is removal of aboveground vegetation and hoof action, potentially leading to increased erosion, increased runoff, reduce infiltration rates and increased bulk density (compaction) (Holechek, Pieper, & Herbel, 2004, p. 379). Most of the compaction and erosion will occur where cattle tend to congregate which may include areas along trails, fence and near watering locations. This compaction leads to lowered rates of water infiltration thus leading to high rates of surface runoff and greater soil erosion.

From a positive standpoint, large quantities of dung and urine are deposited int the allotments adding nutrients and organic matter to the soil (McNaughton, 1979). Hoof action benefits the soil resource by improving nutrient cycling by incorporating mulch into soil surface where it can be broken down more quickly by soil organisms (Holechek, Pieper, & Herbel, 2004, p. 379). Livestock grazing can loosen the soil surface during drying periods, remove excess vegetation that may negatively affect net carbohydrate fixation and increase water transpiration rates, and speed up the development of humus in the soil (Holechek, 1981). Because no changes in the current management are being implemented under the proposal, impacts to the soil resource would remain the same and BLM expects no changes from the current state of the resource.

Alternative II-No Grazing Alternative

With the removal of grazing from the allotments, forage would not be removed by livestock. Standing vegetation and litter would increase. The increase in cover may reduce runoff and erosion. With the removal of livestock from the allotment a decrease in compaction and increase infiltration would be anticipated (Pluhar, Knight, & Heitschmidt, 1987). The nutrient cycle in the allotment would likely change. Cattle can increase soil nutrients by depositing excrement on the soil surface. However, with improper management, they may decrease nutrients by consuming and permanently removing plants that put nutrients into the soil system.

4.1.3 Vegetation

Alternative I-Proposed Action Alternative

The effects grazing has on vegetation varies greatly depending on factors including but not limited to: resistance to grazing, genetic potential, growth promoting features, grazing intensity, life stage of plant, and environmental constraints (Holechek, Pieper, & Herbel, 2004, pp. 123-142). Livestock grazing can have beneficial and detrimental effects on vegetation depending on the various factors described by Holechek. Beneficial impacts may include but are not limited to growth stimulation from grazing ruminants saliva (McNaughton, 1979), trampling of seed into the ground (Holechek, 1981), reducing excess accumulation of standing dead vegetation and mulch that may chemically and physically inhibit new plant growth (Holechek, 1981), and reducing transpiration losses (Holechek, Baker, Boren, & Galt, 2006). Some detrimental impacts livestock grazing may have on vegetation include but are not limited to changes in species composition in upland areas (Brock & Green, 2003), tillering may be reduced (Belsky, 1986), modifying the growth form of plants by consuming terminal buds thereby promoting lateral branching (Fleischner, 1994), and disruption of ecological succession (Fleischner, 1994).

Under the proposed action alternative, approximately 743 AUMs of forage will be removed by livestock annually. Most studies showed that with light to moderate stocking rates, rangelands would not be compromised. The AUMs authorized are based on a light to moderate stock rate. Therefore, as long as the total number of permitted AUMs consumed does not exceed the authorized use for the allotments, the impacts associated with renewing the grazing leases should not have an undesirable effect on vegetation.

Alternative II-No Grazing Alternative

The no grazing alternative would eliminate both the beneficial and detrimental impacts associated with grazing. It is likely with the removal of grazing that litter would increase, thus increasing fire potential in the allotments. More vegetation would be available for wildlife and ecosystem function. However, Patton et al., (2007) found that production does not increase with the removal of grazing. Other studies found that removal of grazing can lead to an increase in shrub cover and a decrease in species richness and plant diversity (Manier & Hobbs, 2007).

4.1.4 Noxious Weeds and Invasive Non Native Plant Species

Alternative I-Proposed Action Alternative

Livestock can potentially transport noxious weeds and invasive non native plant species on their coats, feet, and digestive tract. Livestock may carry undesirable plants that already exist on the allotments or bring them from other pastures they have spent time in during their life. Livestock grazing can increase the presence of noxious weeds by over-grazing (DiTomaso, 2000); this is the primary cause of unwanted species invasion (Holechek, Pieper, & Herbel, 2004, p. 508).

Since many roads and trails are in the allotments, and recreational opportunities exist in the area, new weed introductions are likely to regularly occur. BLM, county weed and pest agency, and grazing lessee monitor these infestations to determine if management changes are needed to control the infestations. Because current and proposed management does not exceed recommended grazing levels and no management concerns occur at this time, BLM anticipates no increases in noxious weeds or invasive non-native plant species will occur under the proposal.

Alternative II-No Grazing Alternative

Removing livestock grazing from the public land can promote growth and potential overgrowth of perennial grasses and forbs, thus crowding out or reducing the potential for invasion of noxious and/or invasive species. Yet the overgrowth of vegetation increases the availability of fine fuels, which also increases the wildfire risk. Such fires would also be more intense, allowing opportunistic noxious and invasive species to colonize the public lands. Cooperative weed control efforts could discourage vegetation overgrowth and decrease the fire return interval.

4.1.5 Water Resources

Alternative I-Proposed Action Alternative

Livestock are attracted to riparian areas by environmental and nutritional factors and may use riparian vegetation disproportionately more than adjacent uplands (Gillen, Krueger, & Miller, 1985) (Howery, Provenza, Banner, & Scott, 1996). This attraction can lead to higher use to the riparian and riparian like areas thus, leading to a decline in streambank stability, a decline in the cover/streambank class with concomitant increase in the uncovered/unstable class, increase in soil erosion (McInnis & McLver, 2001), removal of wood vegetation, soil compaction, and reduced water quality (Parsons, Momont, Delcurto, McInnis, & Porath, 2003). Although uncontrolled livestock grazing can result in watershed destruction in certain areas, controlled grazing is not detrimental to water quality and may increase water quantity (Holechek, 1981). No major degradation problems existed under the past and current management of livestock in these allotments. BLM expects impacts to water resources to remain unchanged.

Alternative II-No Grazing Alternative

The removal of grazing would improve and/or maintain riparian health. Decreased use will occur on riparian plants, thus reducing trampling and hoof shearing along the green line of riparian areas. Total vascular vegetation, shrub, and graminoid canopy cover would increase with the exclusion of livestock (Schulz & Leininger, 1990).

4.1.6 Wildlife

4.1.6.1 Migratory Birds, Special Status Species, Threatened and Endangered Species, and Small Mammals

Alternative I-Proposed Action Alternative

(See Tables A.1 and A.2) The FWS issued a block clearance for the endangered black-footed ferret in the PRB. Alternative B would have "no effect" on black-footed-ferrets. The proposal will have "no effect" on Ute ladies'-tresses orchid because its habitat is not present.

Alternative II-No Grazing Alternative

The FWS issued a block clearance for the PRB for the endangered black-footed ferret. Alternative A would have "no effect" on black-footed-ferrets. If grazing is removed from the allotment, there will be "no effect" on Ute ladies'-tresses orchid, because the allotments lack its habitat. Cancelling grazing may have a negative impact burrowing owls and black-tailed prairie dogs by reducing the number of grazed areas, which provide preferred habitat for these species.

4.1.6.2 Candidate Species

Alternative I-Proposed Action Alternative

The proposal "will impact" GSG habitat. Livestock grazing can benefit or degrade GSG habitat, depending on the timing, stocking rate, and habitat affected. Fall grazing may favor upland forb production, and ranchers may usespring grazing to remove herbaceous cover and make forbs more accessible (Smith, Malechek, & Fulgham, 1979), (Fulgham, Smith, & Malechek, 1982).

Spring and early summer grazing may help control weeds and remove woody plants, thereby decreasing the risk of wildfire that could remove large areas of habitat (Mosley, 1996), (Olson & Wallander, 2001), (Merritt, Prosser, Sedivec, & Bangsund, 2001), (Riggs & Urness, 1989).

Excessive or poorly managed grazing causes degradation of sagebrush ecosystems and thus GSG habitat (BLM, 2002). Inappropriate grazing management in uplands can reduce perennial grasses and forbs while favoring annual grasses and increasing sagebrush cover (Branson, 1985), (Tisdale, 1994), (Beck & Mitchell, 2000), (Bork, West, & Walker, 1998). This may impact GSG, because they rely on perennial grasses for escape cover and residual herbaceous cover for screening cover in nesting habitat. Forbs are positively associated with survival and recruitment of GSG chicks. Inappropriate grazing that damages meadows and riparian areas can harm GSG, because these areas are critical for GSG in late summer. Livestock may occasionally trample GSG nests or cause GSG to abandon their nests (Call, 1979), (Patterson, 1952).

Livestock grazing historically occurred on these allotments and the BLM expects no additional impacts, other than those that occurred as a result of long-term use, from implementation of the proposed action. Continuing to manage for the Wyoming Standards for Rangeland Health will promote GSG habitat viability.

BLM derived the average stocking rate of 4.5 acres per AUM on the White Tail Butte, Upper White Tail Creek, and Butte Draw Allotments from the production potential of the land based on topographic features, soil types, vegetative characteristics, and annual precipitation. Livestock stocking rates in the BFO are designed to meet the 6 S&Gs. Particularly applicable to GSG is Standard 4, which requires that rangelands be capable of sustaining viable populations and a diversity of native plant and animal species. [BLM performed an assessment of S&Gs for the Whitetail Creek Allotment in August 2010 finding the public range met all standards.

Alternative II-No Grazing Alternative

Under the no grazing alternative, no benefits to GSG habitat as a result of grazing management would occur. Excluding livestock does not necessarily cause an area to return to its pre-grazing condition or guarantee improvements in species richness, diversity, or vegetation production (Manier & Hobbs, 2007). Some habitats reach a threshold where livestock exclusion does not affect the current trend (Wambolt & Payne, 1986), (Sanders & Both, 1983). Other research shows that rest from grazing in Wyoming big sagebrush habitats may improve understory production while decreasing sagebrush cover (Wambolt & Payne, 1986). On Wyoming big sagebrush sites with dense sagebrush and annual grass understory, eliminating grazing can increase fire risk which results in habitat degradation (Peters & Bunting, 1994), (West, 1999).

4.1.6.3 Big Game

Alternative I-Proposed Action Alternative

By managing land to meet Rangeland Health Standards and improving overall rangeland condition, forage for deer and pronghorn will improve. Forage resources on winter ranges typically limit mule deer populations (Clements & Young, 1997). Livestock grazing tends to favor shrubs over grasses, and thus may provide more desirable winter browse conditions on the allotments (Austin & Urness, 1998), (Austin, Urness, & Riggs, 1986), (Smith A. D., 1949). Livestock grazing may enhance big game forage by reducing unpalatable standing dead material (Short & Knight, 2003). Big game and cattle may compete for forage on a minor level. There is

very little dietary overlap between cattle, pronghorn, and deer during spring and early summer, since cattle feed primarily on grasses while pronghorn and deer select mostly forbs and some grasses. Cattle begin to use more forbs in late summer and fall, potentially increasing competition. Pronghorn and deer increase the amount of shrubs in their diet in fall and winter, thus reducing competition during those seasons (Anderson & McCuistion, 2008). Proper grazing management can improve winter forage conditions for big game (Anderson & Scherzinger, 1975). Livestock grazing has occurred historically on these allotments and the BLM expects no additional impacts from implementation of the proposed action.

The fences on the allotment pose a hazard to deer and pronghorn. In the BFO resource area, fences have caught and trapped deer and antelope. Modifying fence in areas used by cattle to a more wildlife "safe" design with height under 48 inches and the bottom wire 16 inches from the ground may reduce this hazard. Fences in this allotment are primarily on private land and are not subject to BLM management.

Alternative II-No Grazing Alternative

Under the no grazing alternative, winter browse conditions for big game would not improve. Encroaching herbaceous species may ultimately out-compete shrub species, resulting in a reduction in quality of big game winter range (Smith A. D., 1949). Additionally, livestock would not remove unpalatable standing dead material, resulting in unimproved forage.

4.1.6.4 Raptors

Alternative I-Proposed Action Alternative

Results from research and monitoring studies suggest that livestock grazing is likely to impact some species of raptors while favoring others (Bock, Saab, Rich, & Dobkin, 1993). Livestock grazing may cause the direct impacts of nest and egg destruction of ground-nesting species due to trampling by livestock, or nest abandonment by birds intolerant of disturbance. Grazing management practices can change vegetation composition, leading to the indirect impacts of changing prey composition and availability. Continued livestock grazing will favor those species that benefit from the alterations in habitat that occur in response to grazing (Bock, Saab, Rich, & Dobkin, 1993). A recent study to assess the impacts of rotational cattle grazing on rodents and raptors suggests that raptor use and prey availability can be affected by livestock grazing. In comparisons between grazed and ungrazed areas, raptor use declined by 15% in the grazed area, but increased by 63% on the ungrazed area. Rodent abundance declined and remained lower in the grazed area for the duration of the study (Johnson & Horn, 2008).

Livestock grazing historically occurred on this allotment and the BLM expects no additional impacts, other than those that occurred as a result of long-term use, from implementation of the proposal. Good grazing management could maintain or improve nesting habitats for groundnesting raptor species, improve prey abundance, and availability by enhancing habitat conditions.

Alternative II-No Grazing Alternative

Under the no-grazing alternative, occasional trampling of nests by livestock would not occur. Livestock grazing would not alter habitats, thus benefitting some raptor species while negatively affecting others (Bock, Saab, Rich, & Dobkin, 1993).

4.1.7 Cultural, Historic Values, and National Register of Historic Places (NRHP) Eligibility Alternative I-Proposed Action Alternative

Any activity that removes vegetation or leads to soil erosion can cause impacts to cultural resources. Livestock concentration areas (such as those that form near water sources, supplemental feeding areas, fence corners, etc.) and livestock trail formation may result in impacts to cultural resources. According to the State Protocol Agreement between the Wyoming BLM and the Wyoming State Historic Preservation Office (SHPO), grazing lease renewals that do not include seasonal grazing changes or changes in livestock types are exempt from case-by-case review. As per Appendix B item #27 and per section IV (A) (3) of the Wyoming State Protocol, on April 24, 2013 the Bureau notified the SHPO of these grazing lease renewals.

Alternative II-No Grazing Alternative

The absence of grazing will have no effect on cultural resources.

4.1.8 Socioeconomics

Alternative I-Proposed Action Alternative

The proposed action would allow the grazing lessees to continue their ranch operations. They will continue to contribute to the Wyoming economy benefiting Wyoming, Campbell County and local governments. The federal government would continue to collect grazing fees from the grazing lessees and this commodity use would continue to generate revenues for the federal government to provide money for range projects and revenue for the Wyoming state government.

Alternative II-No Grazing Alternative

The removal of grazing would increase the financial stress on both the BLM and the adjacent land owners as the federal land would have to be fenced from private land to ensure no grazing occurs on federal land. The landowners rely on the public lands for their operation and with the removal of grazing the landowner would have to find other means to manage their operation either through sale of their livestock or renting much more expensive private lands.

4.2 Cumulative Effects

The CEQ regulations define cumulative effects as "the impact on the environment which results from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions regardless of what agency (federal or non-federal) or person undertakes such actions" (40 CFR 1508.7). It is anticipated that implementation of any of the alternatives in combination with the past, present and reasonably foreseeable actions would not result in any measurable cumulative impacts.

Past, Present and Reasonably Foreseeable Actions

Past, present, and reasonably foreseeable actions within all cumulative effects affected areas (CEAA) that may contribute to cumulative effect to various resources present include livestock grazing, hunting, recreational activities, fire, oil/gas activities, and ROWs. It should be noted that result of the impacts of the past and present actions are described in Section 3 of this EA. With respect past and present actions on GSG and habitat fragmentation see 4.2.5 Candidate Species.

Livestock grazing occurred in the area for over 100 years. Approximately 4,900 total AUMs are available annually on the public, private, and state land in the allotments. No changes to authorized AUMs, season of use, and kind/number of livestock are anticipated in the allotments. Livestock grazing will likely continue unless resources conditions or rangeland health warrants otherwise. Additional actions associate with livestock grazing include: off-high way vehicle (OHV) travel, feeding of mineral and protein supplements, and hauling and trailing livestock.

Hunting and recreational activities occurred within the allotments for many years and still is a substantial land use in the area. BLM expects these uses to continue with few changes.

Fire occurred in the area in the past. Fire regime is the role fire plays across the land scape. The majority of the project area is in a Fire Regime Class II, in which the fire frequency is high severity (stand replacement of greater than 75% of the dominant over story vegetation being replaced). Fire Regime Condition Class (FRCC) determines how similar a landscape is to its natural or historical regime. The project area is in the FRCC of 2 which defines the area as having similar key ecosystem components including vegetation and disturbances such as fire. Wildfires are likely to occur in the future.

The BLM permits federal mineral development (coalbed natural gas, conventional oil, and coal) in the PRB. This includes federal minerals below federal and/or private (split estate) surface. The BLM prepares NEPA analyses for federal mineral development. Generally companies submit proposals, often as plans of development (PODs) that consist of 1 to 200 wells. Mineral development is common in the area and numerous PODs are present. Although permitting of oil and gas wells decreased in the PRB, it is likely this activity will continue. Currently the White Tail Butte, Upper White Tail Creek, and Butte Draw Allotments are in the approved Deen Draw, Harris, and Trend 11 APD Package PODs, and have numerous oil and gas wells. The White Tail Butte Allotment also is in the Homestead Draw 3, Homestead Draw 3 South, Horse Creek North, and Collums PODs.. An EA specific to each POD analyzed the environmental impacts from federal mineral development, and this EA incorporates those by reference to update the current situation and to aggregate the cumulative effects; see Table A.3. Rights-of-way (ROWs) exist in the allotments and more may likely receive approval for the following: water pipelines, power lines, roads, and other federal ROWs. Maintenance and construction of these ROWs will create some surface disturbance that would contribute to the cumulative impacts to various resources.

4.2.1 Livestock Grazing

Geographic Scope and Timeframe

The cumulative effects affected area (CEAA) for livestock grazing is area in the allotment boundaries. BLM selected the CEAA because it identified the scope of the proposed action and alternatives as the area in the allotment boundaries. The direct impacts are anticipated to last for the life of the grazing lease (10 years), while the indirect and long term impacts may last longer.

Incremental Effect from the Proposed Action

With the addition of grazing to the past, present, and reasonably foreseeable actions, the incremental loss of forage available for livestock would occur. As long as mitigation and monitoring techniques are implemented to ensure new roads and trails from recreationists and hunters are not made and fires are suppressed, the loss of vegetation available for livestock should be negligible. Additionally, oil/gas/ROWs will be permitted, thus decreasing the amount of forage available for grazing. But with best management practices (BMPs) being implemented, this should be negligible.

Incremental Effect from the No Grazing Alternative

Reduced surface disturbance would occur with the removal of grazing. The incremental impacts would be less than those expected under the proposed action.

4.2.2 Soils

Geographic Scope and Timeframe

The CEAA for soils is the area within the grazing allotment boundaries. The CEAA was selected because the scope of the proposed action and alternatives has been identified as the area within the allotment boundaries. The direct impacts are anticipated to last for the life of the grazing lease (10 years), while the indirect and long term impacts may last longer.

<u>Incremental Effect from the Proposed Action</u>

The effects of the proposed action, when added to the reasonably foreseeable actions, should be minimal as rangeland health objectives are used in livestock grazing management, hunters and recreationists will be monitored for land abuse, fire suppression will mitigate the severity of the impacts, and BMPs will be used for new oil, gas and ROW activities. The incremental effects may include soil erosion and soil compaction along new trails made from livestock, roads and trails used by hunting and recreationists, new oil and gas roads, and areas where fires occur. Severity of these impacts would be dependent on the amount of hunter and recreationist use on the allotments, number of oil/gas/ROWs permitted, and the intensity/size of the wildfires.

<u>Incremental Effect from the No Grazing Alternative</u>

Reduced surface disturbance would occur with the removal of grazing. The incremental impacts would be less than those expected under the proposed action.

4.2.3 Vegetation, Noxious Weeds and Invasive Plant Species

Geographic Scope and Timeframe

The CEAA for vegetation, noxious weeds, and invasive plants is the grazing allotment boundaries. BLM selected the CEAA because it identified the scope of the proposed action and alternatives as the area in the allotment boundaries. BLM anticipates the direct impacts to last for the life of the grazing lease (10 years), while the indirect and long term impacts may last longer.

<u>Incremental Effect from the Proposed Action</u>

The effects of the proposal, when added to the reasonably foreseeable actions, should be minimal as S&Gs are used in livestock grazing management, hunters and recreationists will be monitored for land abuse, fire suppression will mitigate the severity of the impacts, and BMPs will be used for new oil, gas and ROW activities. The incremental effects may include forage loss and introduction of non-native species along new trails made from livestock, roads and trails used for hunting and recreation, new oil and gas roads, and areas where fires occur. Severity of these impacts would be dependent on the amount of hunter and recreationist use on the allotments, number of oil/gas/ROWs permitted, and the intensity/size of the wildfires.

<u>Incremental Effect from the No Grazing Alternative</u>

Reduced surface disturbance would occur with the removal of grazing. The incremental impacts would be less than those expected under the proposed action.

4.2.4 Water Resources

Geographic Scope and Timeframe

The CEAA for water resources is the area within the grazing allotment boundaries. The CEAA was selected because the scope of the proposed action and alternatives has been identified as the area within the allotment boundaries. The direct impacts are anticipated to last for the life of the grazing lease (10 years), while the indirect and long term impacts may last longer.

<u>Incremental Effect from the Proposed Action</u>

Implementation of the proposed action in combination with any past, present, and reasonably foreseeable actions may increase the possibility for decreased water quality and quantity. This could result from soil erosion into riparian areas. The incremental impacts should be minimal as rangeland health objectives are used in livestock grazing management, hunters and recreationist will be monitored for land abuse, fire suppression will mitigate the severity of the impacts, and BMPs will be used for new oil, gas and ROW activities.

Incremental Effect from the No Grazing Alternative

Reduced surface disturbance would occur with the removal of grazing. The incremental impacts would be less than those expected under the proposed action.

4.2.5 Wildlife (Migratory Birds, Special Status Species, Threatened and Endangered Species, Small Mammals, Big Game, Raptors)

Geographic Scope and Timeframe For Migratory Birds, Special Status Species, Threatened and Endangered Species, and Small Mammals

The CEAA is the Powder River watershed boundary. Many of the species within the watershed are contained within the watershed. Migratory species may travel outside the boundary but most of the life cycle likely occurs within the CEAA. The direct impacts are anticipated to last for the life of the grazing lease (10 years), while the indirect and long term impacts may last longer.

Geographic Scope and Timeframe for Big Game and/or Raptors

The CEAA for is the entire range the species may utilize in their life cycle within the vicinity of the allotments. The direct impacts are anticipated to last for the life of the grazing lease (10 years). While the indirect and long term impacts may last longer.

<u>Incremental Effect from the Proposed Action on Wildlife (Migratory Birds, Special Status Species, Threatened and Endangered Species, Small Mammals, Big Game, Raptors)</u>

Incremental impacts from the proposal when added to the past, present and reasonably foreseeable actions may result in disruption of species habitat through the loss of vegetation and habitat fragmentation. Loss of vegetation would occur from livestock grazing, new roads (recreation/hunting/oil and gas/ROWs), and wild fire. Habitat fragmentation would result from vertical intrusions associated with development and new roads associated with oil, gas, ROWs, and recreation activities. Additionally, the spread of noxious and invasive weeds from the actions may impact habitat quality by changing the native plant community, plant production, plant diversity, and ecological health. The incremental impacts should be minimal as BLM uses S&Gs in livestock grazing management, hunters and recreationists will be monitored for land abuse, fire suppression will mitigate the severity of the impacts, and BMPs will be used for new oil, gas and ROW activities.

Incremental Effect from the No Grazing Alternative on Wildlife (Migratory Birds, Special Status Species, Threatened and Endangered Species, Small Mammals, Big Game, Raptors)

Reduced surface disturbance would occur with the removal of grazing. The incremental impacts would be less than those expected under the proposed action.

4.2.5 Candidate Species - Greater Sage-Grouse (GSG)

Geographic Scope and Timeframe

The CEAA for GSG is any area within a 4 mile radius of GSG leks in the allotments and leks that have a 4 mile buffer in any of the allotments. The direct impacts are anticipated to last for the life of the grazing lease (10 years), while the indirect and long term impacts may last longer.

<u>Incremental Effect from the Proposed Action</u>

Incremental impacts from the proposal when added to the past, present and reasonably foreseeable action may result in habitat alteration of candidate species, specifically GSG. These impacts include loss of forage, cover, and habitat. The actions may also disturb mating and brood rearing that is vital to any special status species known to occur in the area. Loss of vegetation would occur from livestock grazing, new roads (recreation/hunting/oil and gas/ROWs), and wild fire. Habitat fragmentation would result from vertical intrusions associated with development and new roads associated with oil, gas, ROWs, and recreation activities. The GSG population in northeast Wyoming is exhibiting a steady long term downward trend (U.S. Fish and Wildlife Service(USFWS), 2010), (Wyoming Game and Fish Department (WGFD), 2011a). The figure below illustrates a ten-year cycle of periodic highs and lows. Each subsequent population peak is lower than the previous peak. Long-term harvest trends are similar to that of leks attendance (Wyoming Game and Fish Department(WGFD), 2011b). Habitat fragmentation (resulting from oil and gas development) and West Nile virus are the primary contributors to this decline (Taylor, Naugle, & Mills, 2012), (U.S. Fish and Wildlife Service(USFWS), 2010).

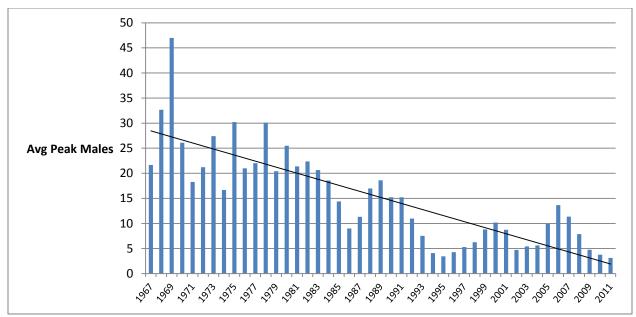


Figure 1. Average peak number of male sage-grouse per active lek near BFO 1967-2011

The spread of noxious and invasive weeds from the actions may impact habitat quality by changing the native plant community, plant production, plant diversity, and ecological health. The incremental impacts should be minimal as BLM uses S&Gs in livestock grazing management, hunters and recreationists will be monitored for land abuse, fire suppression will mitigate the severity of the impacts, and BMPs will be used for new oil, gas and ROW activities.

Incremental Effect from the No Grazing Alternative

Reduced surface disturbance would occur with the removal of grazing. The incremental impacts would be less than those expected under the proposed action.

4.2.7 Cultural and Historic Values/Paleontology

Geographic Scope and Timeframe

The CEAA for cultural and historic values/paleontology is the area in the grazing allotment boundaries. BLM selected the CEAA because the scope of the proposal and alternatives is the area within the allotment boundaries. The direct impacts are anticipated to last for the life of the grazing lease (10 years), while the indirect and long term impacts may last longer.

Incremental Effect from the Proposed Actions

Potential incremental impacts as a result of the proposed action in combination with the past, present and reasonably foreseeable actions may include disturbance to undocumented and document cultural resources. The incremental impacts should be minimal as rangeland health objectives are used in livestock grazing management, hunters and recreationists will be monitored for land abuse, fire suppression will mitigate the severity of the impacts, and BMPs will be used for new oil, gas and ROW activities.

Incremental Effect from the No Grazing Alternative

Reduced surface disturbance would occur with the removal of grazing. The incremental impacts would be less than those expected under the proposed action.

4.2.8 Socioeconomics

Geographic Scope and Timeframe

The CEAA for socioeconomics is the Wyoming economy, and the BLM revenue from multiple use actions. The direct impacts are anticipated to last for the life of the grazing lease (10 years), while the indirect and long term impacts may last longer.

Incremental Effect from the Proposed Action

The most common incremental impact to socioeconomics would be the continued revenue generated from grazing receipts and other permitted actions and positive impact is has on the Wyoming economy would occur.

<u>Incremental Effect from the No Grazing Alternative</u>

The loss of livestock grazing would reduce the money generated from permitted activities on BLM lands. This would impact the Wyoming economy negatively as livestock grazing and the funds it generates is a large part of the Wyoming economy.

4.4 Mitigation/Residual Impacts/Monitoring

Additional mitigation measures are not needed. All measures needed to mitigate the impacts of the proposals are incorporated as design features in the proposals. The impacts of any mitigations measures are analyzed in Section 4 (Environmental Effects) of this document. As per 40 CFR 1505.2(c), monitoring to ensure the proposed action and any design/mitigation features will occur. When time and priorities permit, this monitoring will follow BLM policy and management guidelines that may include supervisions and trend monitoring.

5.0 Tribes, Individuals, Organizations, or Agencies Consulted

Bobby Harris Grazing Lessee for the White Tail Butte Allotment

Brad Harris	Grazing Lessee for the Upper White Tail Creek Allotment
Morse Land Holdings, LLC (Doug & Charlene Camblin)	Grazing Lessee for the Butte Draw Allotment

6.0 List of Preparers

Charlotte Darling, Rangeland Management Specialist, BLM Buffalo Field Office

6.1 List of Reviewers

Name	Title	Duty	Name	Title	Duty
Kay Medders	Range Management	Range, Soils	Scott Jawors	Wildlife Biologist	Wildlife
Doug Tingwall	Archeologist	Cultural Resources	Charlotte Darling	Range Management	Vegetation, Soils
Chris Durham	Asst. Field Manager	Resources	John Kelley	Coordinator	NEPA Planning

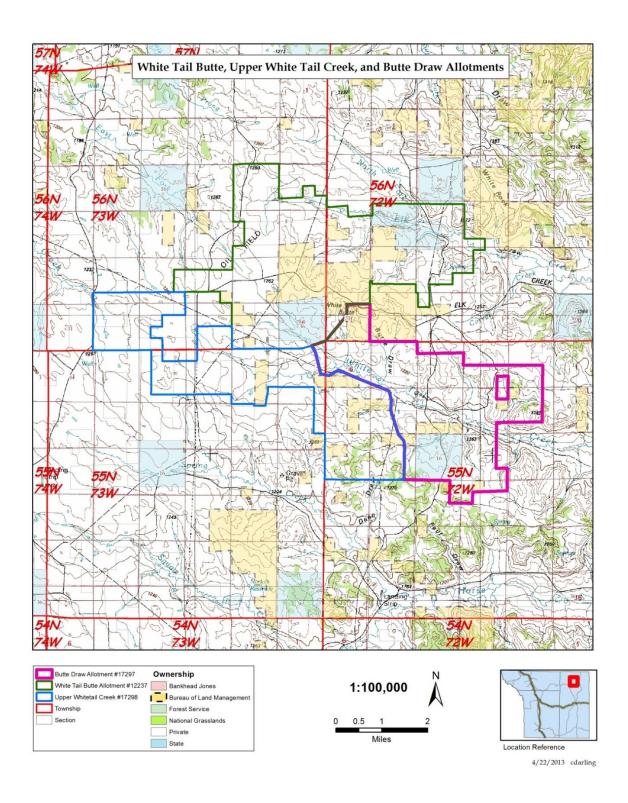
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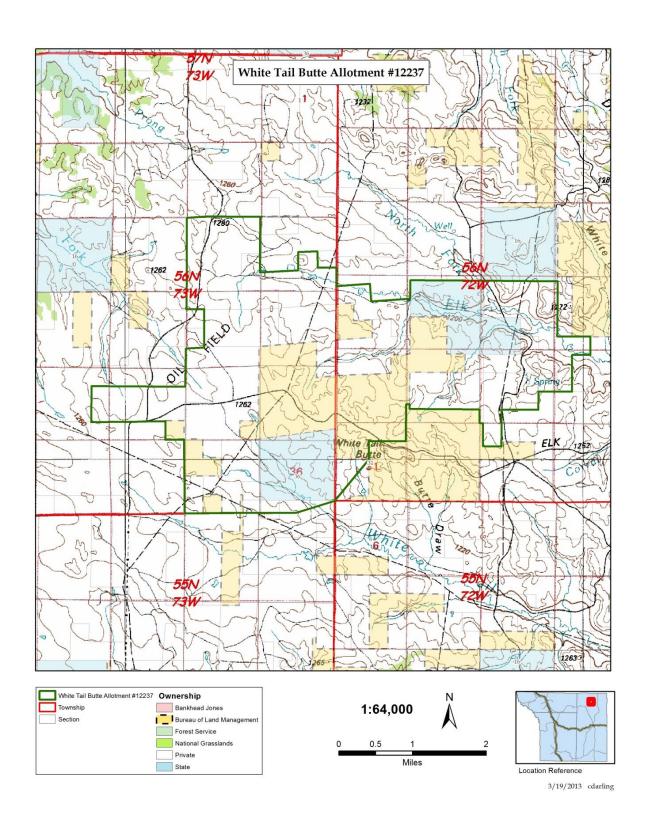
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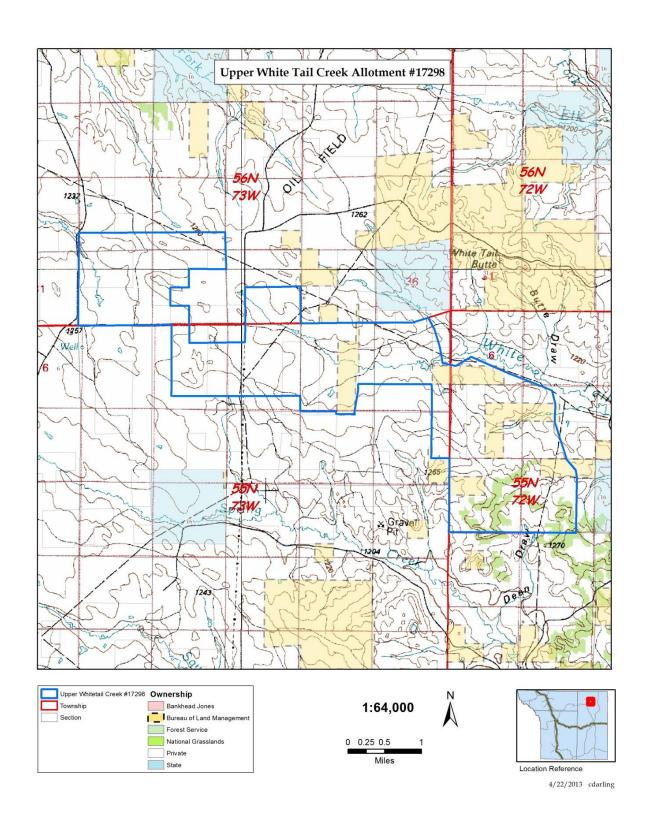
Attachment 1. Maps Map 1.1. White Tail Butte, Upper White Tail Creek, and Butte Draw Allotments



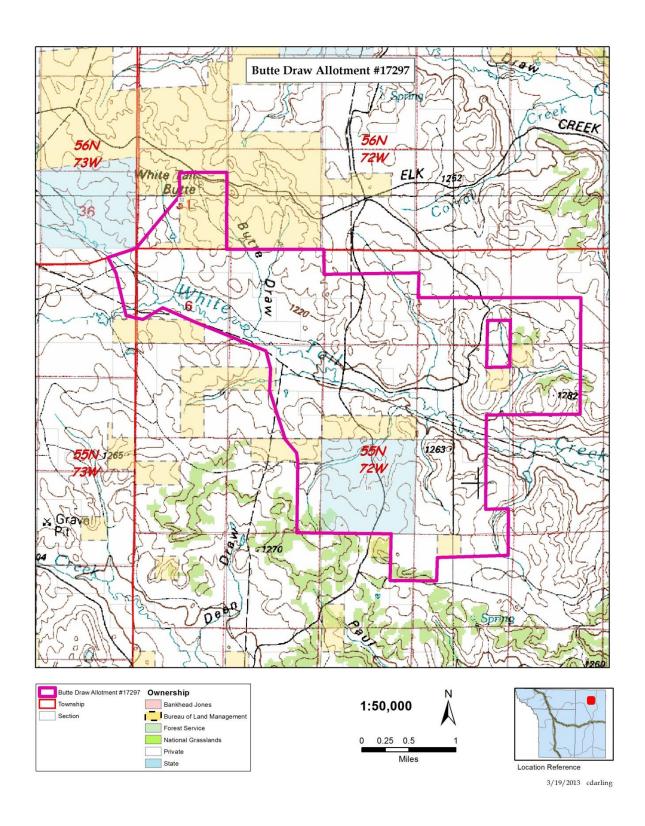
Map 1.2. White Tail Butte Allotment



Map 1.3. Upper White Tail Creek Allotment



Map 1.4. Butte Draw Allotment



Appendix A. Tables.

Table A.1. Summary of Species Habitat and Project Effects.

Common Name (scientific name)	Habitat	Presence	Project Effects	Rationale
Amphibians				
Northern leopard frog (Rana pipiens)	Beaver ponds, permanent water in plains and foothills (SS Policy). Swampy, cattail marshes on the plains (WGFD CWCS).	NS	MIIH	Habitat may be present on private lands in the allotments. Individuals or eggs may be trampled.
Columbia Spotted frog (Ranus pretiosa)	Breeds in the shallows of lakes, ponds, marshes, and small streams (NatureServe).	NS	MIIH	Habitat may be present on private lands in the allotments. Individuals or eggs may be trampled.
Birds				
Baird's sparrow (Ammodramus bairdii)	Grasslands, weedy fields (SS Policy). Un- or lightly grazed mixed-grass prairie, wet meadows, tallgrass prairie. Prairie w/ scattered low bushes and matted vegetation (NatureServe). In dry years, grassy slough bottoms, alkali flats, and depressions in low lying grasslands.	NS	NI	No preferred nesting habitat present.
Bald eagle (Haliaeetus leucocephalus)	Mature forest cover often within one mile of large water body (SS Policy). Nests near large lakes and rivers in forested habitat where adequate prey and old, large-diameter cottonwood or conifer trees are available for nesting (WGFD CWCS). Migrating and wintering eagles congregate near open water areas where concentrations of prey are available, such as carcasses of ungulate species, and spawning areas for kokanee, trout, and other fish (WGFD CWCS).	S	NI	Bald eagles may use the area for foraging. Activities associated with ongoing livestock grazing operations are not likely to occur to such an extent that foraging behavior will be disrupted.
Brewer's sparrow (Spizella breweri)	Basin-prairie shrub (SS Policy). Closely associated with sagebrush shrublands that have abundant, scattered shrubs and short grass (WGFD CWCS).	S	MIIH	Trampling of nests may occur. Negligible impacts from livestock or humans disrupting breeding, dislodging nests, or causing adult to leave eggs or chicks unattended.
Burrowing owl (Athene cunicularia)	Grasslands, basin-prairie shrub (SS Policy). Prefers open prairie, grassland, desert, and shrub-steppe habitats, and may also inhabit agricultural areas. It depends on mammals that dig burrows, which it uses for nesting, roosting, and escape (WGFD CWCS).	S	MIIH	Black-tailed prairie dog colonies present. Grazing impacts to burrowing owls will be negligible.
Ferruginous hawk (Buteo regalis)	Basin-prairie shrub, grasslands, rock outcrops (SS Policy). Semi-arid open country, primarily grasslands, basin-prairie shrublands, and badlands (WGFD CWCS). Requires large tracts of relatively undisturbed rangeland and nests in rock outcrops, the ground, cutbanks, cliff ledges, or trees (WGFD CWCS).	S	MIIH	Ferruginous hawks may forage in this area. One nest has been documented within the allotments. There is a possibility of nest trampling and disturbance to nesting hawks from livestock herding or tending operations.

Common Name (scientific name)	Habitat	Presence	Project Effects	Rationale
Loggerhead shrike (Lanius ludovicianus)	Basin-prairie shrub, mountain-foothill shrub (SS Policy). Grasslands interspersed with scattered trees and shrubs that provide nesting and perching sites.	S	MIIH	Ongoing livestock operations will not result in substantially reduced shrub cover or habitat fragmentation. Nests may be toppled by livestock.
Long-billed curlew (Numenius americanus)	Grasslands, plains, foothills, wet meadows (SS Policy). Inhabits a variety of grassland types ranging from moist meadow grasslands to agricultural areas to dry prairie upland, usually near water. Prefers a complex of shortgrass prairies, agricultural fields, wet and dry meadows and prairies, and grazed mixed-grass and scrub communities. Nests on the ground in habitat that includes grass <12", bare ground, shade, abundant invertebrate prey, and a minimum on 40 acres of suitable habitat (WGFD CWCS).	NS	МІІН	Marginally suitable habitat may be present. Nests may be trampled.
Northern goshawk (Accipiter gentilis)	Conifer and deciduous forests (SS Policy). Mixed coniferous habitat of a wide variety of ages, structural conditions, and successional stages. Nests in mature stands with multilayered canopies with open understory, small openings, and water within 0.25 miles. Nest stands often on slopes with northerly exposures or in drainages or canyon bottoms protected by such slopes. Post-fledging area is a mosaic of forest types that provide hiding cover and abundant prey. Foraging area may include a variety of forest types and structures but most often consists of forests with a high density of large trees, high canopy closure, high basal area, and relatively open understories, interspersed w/ shrublands and openings with perching trees to observe prey. Winter habitat probably includes a variety of vegetation types, such as forests, woodlands, shrublands, and forested riparian strips (WGFD CWCS).	NS	NI	Forested habitat sparsely scattered.
Peregrine falcon (Falco peregrinus)	Cliffs (SS Policy). Forages in open woodlands and forests, shrub-steppe, grasslands, marshes, and riparian habitats. Nests in cliffs that are usually proximate to habitats with abundant prey (WGFD CWCS).	NP	NI	Nest substrate not present. No known breeding pairs in proximity.
Sage sparrow (Amphispiza billneata)	Basin-prairie shrub, mountain-foothill shrub (SS Policy). Considered sagebrush obligate. Inhabits prairie and foothills shrublands habitat where sagebrush is present. Prefers shrublands with tall shrubs and low grass cover, where sagebrush is clumped in a patchy landscape. Requires a large block of un-fragmented habitat to successfully breed and survive (WGFD CWCS).	S	МІІН	Nests may be trampled. Cover will be affected.

Common Name (scientific name)	Habitat	Presence	Project Effects	Rationale
Sage thrasher (Oreoscoptes montanus)	Basin-prairie shrub, mountain-foothill shrub (SS Policy). Considered sagebrush obligate. Inhabits prairie and foothills shrublands habitat where sagebrush is present. Prefers shrublands with tall shrubs and low grass cover, where sagebrush is clumped in a patchy landscape (WGFD CWCS).	S	МІІН	Nests may be trampled. Uncommon cowbird host, which are associated with cattle. May be more susceptible to higher parasitism pressure.
White-faced ibis (Plegadis chihi)	Marshes, wet meadows (SS Policy). Inhabits marshes, wet- moist meadows, lakes, and irrigated meadows. Nests on the ground in bulrushes, cattails, or reeds; on a floating mat; or in a low tree.	NS	NI	Habitat may be present on private lands in the allotments. Ongoing livestock operations should not affect use of the area by Ibis.
Yellow-billed cuckoo (Coccyzus americanus)	Open woodlands, streamside willow and alder groves (SS Policy). Nests primarily in large stands of cottonwood-riparian habitat below 7000 feet, including such habitats that occur in urban areas. It is a riparian obligate species that prefers extensive areas of dense thickets and mature deciduous forests near water, and requires low, dense, shrubby vegetation for nest sites.	NS	МІІН	Suitable habitat may be present. Ongoing livestock operations should not create significant additional impacts. Negligible impacts from livestock or humans disrupting breeding, dislodging nests, or causing adult to leave eggs or chicks unattended.
Migratory bird species (Various)	Multiple vegetation types are used for breeding, foraging and wintering, with habitat types ranging from grasslands and shrub-steppe to woodlands and riparian areas.	K	МІІН	Trampling of nests may occur. Negligible impacts from livestock or humans disrupting breeding, dislodging nests, or causing adult to leave eggs or chicks unattended. Ongoing livestock operations should not create significant additional impacts.
Plains Sharp-Tailed Grouse (Tympanuchus phasianellus jamesi)	Short and mixed-grass prairie, sagebrush shrublands, woodland edges, and river canyons. Common where grasslands are intermixed with other shrublands, especially wooded draws, shrubby riparian area, and wet meadows. Diets include a variety of forbs, grasses and insects. In winter, sharp-tailed grouse also feed on buds and catkins of deciduous trees or shrubs and berries. Birds are also known to feed on the buds of aspen and willow.	S	МІІН	Properly managed grazing will maintain quality cover and habitat. Nests or chicks may occasionally be trampled. There are two known leks located within 2 miles of the South Rosie Draw and Spring Creek #2 allotments. Ongoing livestock operations are not likely to change use of this area by Sharp-tailed grouse.
Mountain plover (Charadrius montanus)	Short-grass prairie with slopes < 5% (SS Policy). Low, open habitats such as arid shortgrass and mixed-grass prairies dominated by blue grama and buffalo grass with scattered clumps of cacti and forbs, and saltbush habitats of the shrubsteppe. Prefers to nest in large, flat grassland expanses with sparse, short vegetation (<=4") and bare ground. Adapted to areas that have been disturbed by prairie dogs, heavy grazing, or fire (WGFD CWCS).	NS	NI	There is little to no suitable plover habitat present. If present, birds may prefer grazed areas.

Common Name (scientific name)	Habitat	Presence	Project Effects	Rationale
Fish – None applicable				
Mammals				
Black-tailed prairie dog (Cynomys ludovicianus)	Prairie habitats with deep, firm soils and slopes less than 10 degrees (SS Policy). Inhabits dry, flat, open, shortgrass and mixed-grass grasslands with low, relatively sparse vegetation, including areas overgrazed by cattle. Constructs burrows in fine to medium soils (WGFD CWCS).	K	MIIH	Prairie dogs often prefer habitats grazed by livestock. Prairie dog colonies are scattered throughout the allotments
Swift fox (Vulpes velox)	Grasslands (SS Policy). Inhabits shortgrass and mixed-grass prairies. Often uses highway and railroad ROWs, agricultural areas, and sagebrush-grasslands. Closely associated w/ prairie dog colonies and uses underground dens year-round. Selects habitat with low-growing vegetation, relatively flat terrain, friable soils, and high den availability (WGFD CWCS).	NS	MIIH	Inappropriate grazing could reduce hiding cover and increase susceptibility to predation.
Townsend's big-eared bat (Corynorhinus townsendii)	Caves and mines (SS Policy). Occupies a variety of xeric to mesic habitats, including coniferous forests, juniper woodlands, deciduous forests, basins, and desert shrublands, and is absent only from the most extreme deserts and highest elevations. Requires caves or abandoned mines for roost sites during all seasons and stages of its life cycle, and its distribution is strongly correlated with the availability of these features (WGFD CWCS). May be limited to areas with reliable, accessible sources of drinking water. Forages primarily along forest and woodland edges, riparian corridors, and in open areas near wooded habitat. May avoid open, grazed pasture land.	S	NI	Availability of roost sites is unknown, but foraging habitat is present. Ongoing livestock grazing unlikely to affect prey abundance or availability of foraging habitat.
Plants – None applicable				
Presence K - Known, documented obser	2 4	mpact.	dividuals o	r habitat, but will not likely contribute to a trend

- S Habitat suitable and species suspected, to occur within the project area.

 NS Habitat suitable but species is not suspected to occur within the project area.

 NP Habitat not present and species unlikely to occur within the project area.

MIIH - May impact individuals or habitat, but will not likely contribute to a trend towards federal listing or a loss of viability to the population or species.

WIPV - Will impact individuals or habitat - the action may contribute to a trend towards federal listing or cause a loss of viability to the population or species.

BI - Beneficial impact

Table A.2. Summary of Threatened and Endangered Species Habitat and Project Effects

Common Name (scientific name)	Habitat	Presence	Project Effects	Rationale			
Endangered							
Black-footed ferret	Black-tailed prairie dog colonies or complexes > 1,000 acres.	NP	NE	Black-footed ferrets have been "block-cleared" for Northeast Wyoming.			
(Mustela nigripes) Threatened	complexes > 1,000 acres.						
11111		Habitat not present					
Candidates for listing							
Greater Sage-Grouse (GSG) (Centrocercus urophasianus)	Basin-prairie shrub, mountain-foothill shrub. Iincludes wet-moist meadows, and alfalfa and irrigated meadows when adjacent to sagebrush (WGFD CWCS).	S		There are 4 leks within 4 miles of BLM land in the EA area. Incubating female, eggs, and/or chicks may occasionally be trampled. Ongoing livestock operations are not likely to change current use of this area by nesting GSG.			
Presence K - Known, documented observation within project area. S - Habitat suitable and species suspected, to occur within the project area. NS - Habitat suitable but species is not suspected to occur within the project area. NP - Habitat not present and species unlikely to occur within the project area.				Project Effects LAA - Likely to adversely affect NE - No Effect NLAA - May Affect, not likely to adversely affect individuals or habitat. NLJ - Not likely to jeopardize continued existence MIIH - May impact individuals and habitat NP—Habitat not present and species unlikely to occur within the project area.			

Table A.3. This EA Incorporates by Reference the Following NEPA Analysis from the Analysis Area of the 3 Proposed Allotments

#	Onewater / Preject Name	NEPA Document #	Proposed Allotment Analysis Area			Annuaval
	Operator / Project Name	NEPA Document #	White Tail Butte	Upper White Tail Creek	Bear Draw	Approval
1	Suncor / Deen Draw	WY-070-06-024	X	X	X	2006
2	Cedar Ridge / Harris	WY-070-08-132	X	X	X	2008
3	Trend / Trend 11 APD	WY-070-11-38	X	X	X	2010
4	Termo / Homestead Draw 3 & 3 South	WY-070-182	X			2007
5	Windsor / Horse Creek North	WY-070-07-131	X			2007
6	Pennaco / Collums	WY-070-03-207	X			2003